ALCOHOLICS IN EMERGENCY ROOMS*

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MANY studies document that much of the general public seeks assistance in emergency rooms for a range of problems for which these services are not designed, equipped, or staffed. Although emergency rooms typically diagnose and treat acute physical conditions effectively, emotional, social, and chronic physical problems are less well handled. This mismatch between patient requests and system capability contributes to mutual frustration, treatment failure, repeated visits, and wasted health care resources.

The contribution of alcoholism to this problem has not been widely appreciated. The prevalence of alcoholism among individuals presenting to emergency rooms has been variously estimated at between 15 and 38%, depending on the screening instrument used and the type of hospital evaluated. Multiple visits by the same person further increase the impact of alcoholism on the emergency care setting. Alcoholics generally receive adequate short term care for acute physical problems, yet fewer than half are diagnosed as alcoholic, and few are referred.[1,2] Unless the more fundamental problem of alcoholism is identified and addressed, treatment failure is likely. For those alcoholics presenting with problems which may be neither physical nor acute, little or no problem-oriented care is delivered. Thus, an average emergency room with 50,000 patient visits per year at costs of $60 per visit might conservatively be spending $750,000 to care for alcoholics in emergency rooms, much of it not well spent.

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In 1977 a random sample of adults presenting to the emergency room at the Erie County Medical Center took the Michigan Alcoholism Screening Test.[3] Our hospital is a county hospital as well as a university teaching center. The emergency room processes approximately 45,000 visits per year, and it is staffed primarily by a resident staff which rotates to other services and hospitals. The hospital also has an inpatient alcoholism detoxification unit and outpatient services. This preliminary needs study showed that 25% of the patients visiting our emergency room were alcoholics and suggested that there were two relatively distinct populations of alcoholics. One was characterized by multiple emergency room visits and prior alcoholism treatment and was more readily identified by emergency room staff. The second population was characterized by few or no prior visits, was often poorly identified, and had little or no prior treatment. Item analysis of the Michigan Alcholism Screening Test showed that 75% reported no prior treatment. The first population was believed to comprise about 20% of the total, but accounted for 70% of the total visits to our emergency room by alcoholics. Thus, a small percentage of the total alcoholic population, often those most readily identified by staff, account for a large number of emergency room visits. Conversely, the larger population of alcoholics who do not frequent our emergency room and had no prior treatment was less well identified. Therefore, they were never referred to the further treatment to which they might respond.

Based on these observations, the Erie County Medical Center established an emergency room consultation program in 1978 to help to meet the needs of the alcoholics in the emergency room and to do so more efficiently. Two strategies are employed. First, a series of system objectives were developed, including diversion of appropriate clients prior to referral to the emergency room, close linkage with sobering up stations, maximal utilization of outpatient services for emergency evaluations, and ongoing liaison with major referral sources. Although the direct impact of these efforts is difficult to assess accurately, we believe that the impact has been modest.

As a second strategy, because substantial numbers of alcoholics will continue to utilize emergency rooms, we have developed direct services for those who do present. That these expectations were realistic has been suggested.[4,5] Efforts are directed toward increased case finding and linkage to the appropriate level of care. Case-finding efforts are directed particularly to those without prior treatment and to those who do not require acute medical and surgical intervention. People requiring such

acute care are admitted to the hospital and further evaluated following admission. Strategies to deal with this inpatient population will be discussed later. Once identified and evaluated, the patient is then linked to services providing acute care such as sobering up, detoxification, and social intervention, as well as directly to such long-term services as inpatient treatment, outpatient care, and Alcoholics Anonymous. In addition, for the small but significant revolving door population, we believe that similar strategies with modified treatment goals, as well as a nonjudgmental and more immediate repsonse to their needs could reduce disruptive behavior within the emergency room, and potentially reduce repeated use of emergency rooms. Education of house staff, nursing staff, and others was intended to be accomplished primarily through example and case consultation.

The program is staffed around the clock by trained paraprofessionals or alcoholism counselors under the supervision of the alcoholism service. On referral from the physician, nurse, or at the client's request, the patient is evaluated using a semistructured interview lasting approximately 45 minutes. The primary purpose of this interview is properly to assess the extent of the alcohol problem, to determine the appropriate level of care required, and to begin the therapeutic process to encourage patients to follow through with these recommendations. The patient's family is also advised of services for their significant others. These recommendations are presented to the patient as well as the physician who has the final decision. Concurrence between counselor's recommendations and physician's dispositions has remained very high. In addition, the counselor provides a preliminary screening to identify clients with acute life-threatening physical or emotional problems. Though this function is somewhat duplicated by the physician, the counseling staff's commitment to alcoholic patients and their knowledge of alcoholism sometimes identified problems not previously identified by the physician. Further, the counselor may also assume an advocacy role for patients to help to insure appropriate care.

Since its inception, the staff has provided approximately 2,000 contacts per year. Although for technical reasons accurate measures of changes in rate of identification of alcoholics have been difficult, we believe that this rate has increased to perhaps 45% from our prior estimate of 33%. Most of this increase appears to result from identification of approximately 900 individuals per year who had no prior treatment. Table I shows selected characteristics of the total alcoholic population from our needs study,

TABLE I. CHARACTERISTICS OF ALCOHOLICS IN EMERGENCY ROOM

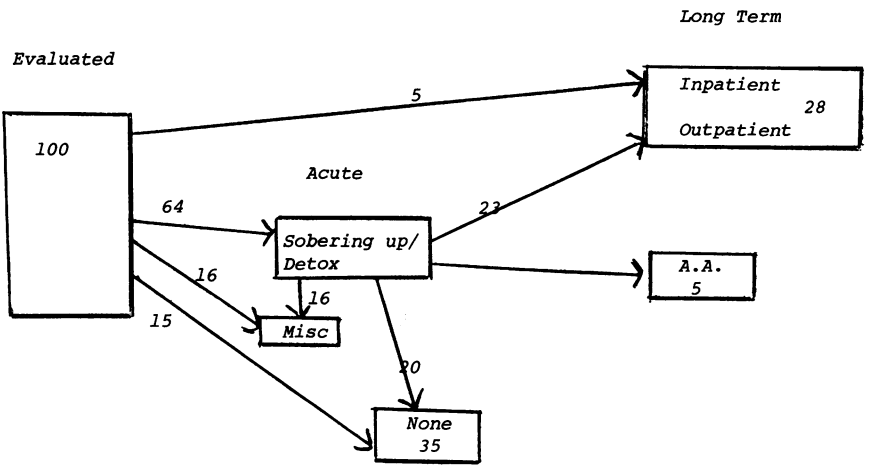
	Male	*Female*	*Nonwhite*	*White*	*Average age*	*No prior treatment*
Est. need (MAST 6+)	68%	32%	50%	50%	38	75%
Identified	75%	25%	34%	76%	43	40%

TABLE II. CHARACTERISTICS OF 100 IDENTIFIED ALCOHOLICS

Sex		*Average age*	*Race*		*BAC*	
No prior treatment						
Male	68%	40	Nonwhite	22%	0-.10	65%
Female	32%		White	78%	.11-.20	20%
N=40					.21+	15%
Prior treatment						
Male	80%	44	Nonwhite	40%	0-.10	50%
Female	20%		White	60%	.11-.20	30%
N=60					.21+	20%
Total						
Male	75	43	Nonwhite	33	0-.10	57
Female	25		White	77	.11-.20	26
N=100					.21	17

compared to those actually identified by our staff. Based on our initial needs data, the unidentified population of alcoholics was 68% male, 50% nonwhite, with an average age of 38, and 75% had no prior alcoholism treatment. Comparison data with those currently identified suggests that although women are still somewhat underidentified, nonwhites are substantially under-represented, as are younger alcoholics and those with no prior treatment. These results suggest that the initial screening mechanisms continue to lack sensitivity, particularly for clients without prior treatment. It has been further suggested that certain subpopulations tend to present with problems that are less obviously directly related to alcoholism and may, therefore, be more easily overlooked.[6] Efforts to improve the rate of identification, particularly of these subpopulations, are underway.

Table II summarizes additional characteristics of alcoholics identified in the emergency room. Those with no prior treatment tended to be somewhat younger, with a higher percentage of women, and were more likely to be white. Of note, a substantial portion of alcoholics in both groups



Follow-up of 100 identified alcoholics

presented with no or very low blood alcohol concentrations, suggesting that the presence of alcohol may not be a sufficiently sensitive screening tool. Similar results have been obtained in outpatient settings.[7]

Figure 1 summarizes the ultimate linkage of 100 identified clients who did not require admission to an inpatient medical-surgical service. Although 35% directly refused or failed to follow through with ongoing, long-term treatment and 32% were referred to resources for which follow-up could not be evaluated, at least 28% entered long-term treatment. An additional group following acute services were referred to Alcoholics Anonymous. Although the follow-through to Alcoholics Anonymous obviously cannot be measured, we have estimated it to be approximately 25%. Thus, approximately one third of those evaluated in an emergency room were linked to long-term care directed toward their fundamental problem of alcohol dependence. Of interest, although not depicted in this figure, the percentage of persons accepting linkage to long-term care following acute service does not appear to be substantially higher than those accepting it directly from the emergency room. Referral to long-term services for this population is often impractical until the issues of substantial alcohol withdrawal or intoxication have been addressed. The immediate needs of these populations differ, and the impact of sobering up and detoxification as factors contributing to increased follow-through cannot be evaluated from these data.

Cost allocation to this program, including staffing, space, and equipment, amounts to approximately $50 a visit, only slightly higher than the average cost of outpatient services in our program. Also, the cost of identifying and linking a client without prior treatment to long-term care is estimated at $178, comparable to other case-finding mechanisms such as employee assistance programs. Direct cost to the hospital is partially offset by an increase in appropriate admissions to the detoxification unit. Although we have been unable to evaluate the fiscal impact of this program on the other components of the health care network, others have suggested that linkage to long-term care does reduce subsequent utilization of health care services.

Other less measurable, though substantial, results have been obtained. There appears to be a decrease in the prescription of psychotropic drugs for patients discharged from the emergency room. There has been a decrease in the waiting time in the emergency room for alcoholics prior to receiving any service, a decrease in the percentage of persons leaving the emergency room without any care, and a decrease in the incidence of acting out behavior by alcoholics in the emergency room.

In summary, the large number of alcoholics who utilize emergency rooms are often neither identified nor linked to ongoing care directed at their fundamental problem. As a component of a system of services, we have in a large general hospital expanded emergency capabilities to provide such diagnostic and linkage services and have thus increased the rate of identification, particularly of those with no history of prior treatment, and have been able to link many to long-term alcoholic treatment. We believe that the essential elements of this program can be implemented in other emergency rooms. The relatively modest increased cost can be partially offset through improved efficiency in emergency rooms and by incorporating this service as a component of a network of care.

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